REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 12-20 are currently pending. Claims 12 and 19 are independent. The remaining claims depend directly or indirectly from claims 12 and 19.

Claim Amendments

Claims 19 and 20 are amended by this reply for purposes of clarification. Claim 12 is amended to correct a typographical error. No new matter is added by way of these amendments as support for these amendments may be found, for example, in paragraphs [0025]-[0034] of the Publication of the present application (U.S. Publication No. 2007/0028261).

Rejection(s) under 35 U.S.C. § 101

Claims 19 and 20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. *See* Office Action dated February 4, 2009, pages 2 and 3.

"A claimed process is surely patent-eligible subject matter under § 101 if: (1) it is tied to a particular machine or apparatus, *or* (2) it transforms a particular article into a different state or thing." [Emphasis Added]. *In re Bilski*, No. 2007-1130, slip op. at 9 (Fed. Cir., 2008).

Amended claim 19 is now directed to "method for obtaining advertisement selection information *in a set-top box* on a broadcast side in a television network." [Emphasis added.] Applicant asserts that a set-top box (*i.e.,* a television set) is a particular apparatus. Accordingly, amended independent claim 19 is directed to statutory subject matter. In addition,

amended dependent claim 20, which depends directly from claim 19, is directed to statutory subject matter for at least the same reason. In view of the above, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 102

Claim 19 is rejected under 35 U.S.C. § 102(e) as being anticipated by US Publication No. 2003/0229531 ("Heckerman"). For the reasons set forth below, to the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. *See* MPEP § 2131. The Applicant respectfully asserts that Heckerman does not disclose each and every limitation recited in the amended independent claim.

Amended independent claim 19 recites, in part, "determining for a determined advertisement a final number of selections respectively for each one of a plurality of advertisement spaces."

Turning to the rejection, Applicant respectfully asserts that Heckerman fails to disclose *determining a final number of selections* of a particular advertisement for a particular advertisement space. Heckerman discloses "[m]odifying advertisement scores based on advertisement response probabilities." *See* Heckerman, Title. Specifically, Heckerman "relates to targeted advertising...[by] modifying an advertisement score based on a probability that a user will respond to the advertisement, the advertisement score being indicative of whether the advertisement should be presented." *See* Heckerman, paragraph [0002]. In other words, Heckerman arguably modifies an advertising score based on the likelihood of response from a

targeted audience, and a user determines whether to run the advertisement based, in part, on the advertising score. *See* Heckerman, paragraph [0018]. Regardless of the advertisement score assigned to an advertisement in Heckerman, though, there is *no certainty whether an advertisement will be shown.* Thus, it is not possible for Heckerman to determine a final number of selections of a particular advertisement, as required by amended independent claim 19. It logically follows from the above that Heckerman fails to show or suggest selecting a particular advertisement *for a particular advertising space,* as required in amended independent claim 19, because Heckerman does not definitely run every advertisement to which an advertisement score is assigned.

In view of the above, Heckerman clearly does not anticipate amended independent claim 19. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

MPEP § 2143 states that "[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit." Further, when combining prior art elements, the Examiner "must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference...." MPEP § 2143(A).

Claim 20

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Heckerman in view of US Publication No. 2006/0029368 ("Harville"). For the reasons set forth below, to the extent this rejection applies to the amended claim, this rejection is respectfully traversed.

As described above, Heckerman fails to show or suggest each and every element of amended independent claim 19. Specifically, Heckerman fails to show or suggest at least determining a final number of selections of a particular advertisement for a particular advertisement space, as required by amended independent claim 19.

Further, Harville is merely directed to "iterative, maximally probable, batch-mode commercial detection for audiovisual content," (*see* Harville, Title) and fails to supply that which Heckerman lacks. Specifically, Harville teaches identifying candidate (*i.e.*, commercial break) times to create a score for each commercial break time. *See* Harville, paragraph [0008]. Harville then teaches constructing one or more commercial breaks "based on an evaluation of the adjusted scores of the candidate times and relationships among the candidate times." *See* Harville, paragraph [0029]. In other words, Harville analyzes commercial breaks rather than the advertisements to fill those commercial breaks. Consequently, Harville fails to show or suggest determining *a final number of selections of an advertisement*, as required in amended independent claim 19. Also, as in Heckerman, regardless of the advertisement time score assigned to a commercial break in Harville, there is *no certainty whether a particular advertisement will be shown* for a particular advertising space, as required in claim 19. Accordingly, a combination of Heckerman and Harville fails to show or suggest every element of amended independent claim 19.

In view of the above, Heckerman and Harville, whether considered separately or in combination, fail to show or suggest all the limitations of amended independent claim 19. Thus, amended independent claim 19 is patentable over Heckerman and Harville. Dependent claim 20 depends directly from claim 19, and is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 12-18

Claims 12-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Heckerman in view of Harville. For the reasons set forth below, this rejection is respectfully traversed.

Independent claim 12 recites, in part, (i) "generating, in the STB, a random value or a pseudo-random value," and (ii) "attributing a range of values to each probability value received in the STB, wherein the range of values corresponding to each probability value is attributed so as to avoid overlap with distinct associations comprising the determined advertisement space."

Turning to the rejection, Applicant agrees with the Examiner in that, with regard to independent claim 12, "Heckerman fails to teach the range of values corresponding to each (probability) value is attributed so as to avoid overlap with distinct associations comprising the determined advertisement space." *See* Office Action dated February 4, 2009, p. 6. In addition, Applicant respectfully asserts that Heckerman fails to show or suggest "generating, in a set-top box (STB), a random value or pseudo-random value," as recited, in part, by independent claim 12. The Examiner contends that Heckerman teaches generating a random value or a pseudo-random value through the Probability Determination Module (261), as shown in Figure 2 of

Heckerman. *See*, Office Action dated February 4, 2009, p. 5. Applicant respectfully asserts that the Examiner mischaracterizes Heckerman, and that such mischaracterization is improper. Heckerman makes no mention of a random or pseudo-random number generator. In addition, a reading of the description of the Probability Distribution Module in Heckerman reveals no functionality aside from determining probability. Because the advertisement server "use[s] *deterministic rules* when generating advertisement scores" (*see* Heckerman, paragraph [0007]), Applicant respectfully asserts that determining probability, which calculates the likelihood of an event occurring, is, by definition, not the same as a random or pseudo-random number generator. Consequently, Heckerman fails to show or suggest generating a random value or a pseudo-random value, as required by independent claim 12.

Even assuming *arguendo* that determining probability is equivalent to a random or pseudo-random number generator, Applicant asserts that generating a random value is a separate and distinct step from determining probability values. The Examiner cites the Probability Distribution Module (paragraph [0014] of Heckerman) for assigning probability values corresponding to each of the plurality of associations. *See* Office Action dated February 4, 2009, p. 5. As stated above, the Examiner also cites the same Probability Distribution Module for generating the random value. Without further support in Heckerman, which is lacking, the Examiner cannot rely on the Probability Distribution Module to perform both functions. Therefore, Heckerman clearly does not describe the aforementioned limitations recited in amended independent claim 12.

Further, Harville fails to show or suggest what Heckerman lacks. Specifically, Harville fails to show or suggest (i) "generating, in the STB, a random value or a pseudo-random value," and (ii) "attributing a range of values to each probability value received in the STB,

wherein the range of values corresponding to each probability value is attributed so as to avoid overlap with distinct associations comprising the determined advertisement space." First, in addition to making no mention of a STB, Harville fails to show or suggest generating a random value or a pseudo-random value. In fact, Harville makes no mention of a random value or a pseudo-random value. Following the logic for this argument under Heckerman, Harville likewise fails to show or suggest generating a random value or a pseudo-random value.

Second, Harville fails to show or suggest that the range of values corresponding to each probability value is attributed so as to avoid overlap with distinct associations comprising the determined advertisement space. The Examiner contends that lines 1-10 of paragraph [0027] of Harville teach the aforementioned limitation required by independent claim 12. *See* Office Action dated February 4, 2009, p. 6. Applicant respectfully asserts that the Examiner mischaracterizes Harville, and that such mischaracterization is improper. Specifically, paragraph [0027] of Harville describes adjusting the scores associated with each candidate (*i.e.*, commercial break) time and cites a few examples of how such adjustment may occur. Referring to paragraph [0024] of Harville, which describes the purpose of the flow chart in FIG. 1 of Harville, the specific steps of which are described in paragraphs [0025]-[0030], the method in Harville is designed to detect "one or more commercial breaks in a set of audiovisual content, each commercial break including one or more commercials." Applicant asserts that adjusting a score associated with the time of a commercial break, where "the score represent[s] a probability that the candidate time is in fact a beginning or ending of a commercial" (*see* Harville, paragraph [0026]), relates to probability values of commercial breaks, not the commercials themselves. Harville does not consider a determined advertisement, and since Harville calculates probabilities related to potential commercial breaks, Harville cannot consider a determined

advertisement space. Consequently, Harville fails to show or suggest attributing a range of values to each probability value (of advertising selection information for a plurality of associations of a determined advertisement space with a determined advertisement) in such a way as to avoid overlap with the distinct associations comprising the determined advertisement space. Therefore, Harville clearly does not describe the aforementioned limitations recited in independent claim 12.
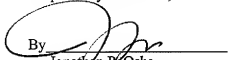
In view of the above, Heckerman and Harville, whether considered separately or in combination, fail to show or suggest all the limitations of independent claim 12. Thus, amended independent claim 12 is patentable over Heckerman and Harville. Dependent claims 13-18 depend directly from claim 12, and are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 11345/063001).

Dated: April 24, 2009   Respectfully submitted,

                                                By _____
                                                   Jonathan P. Osha
                                                   Registration No.: 33,986
                                                   OSHA · LIANG LLP
                                                   909 Fannin Street, Suite 3500
                                                   Houston, Texas 77010
                                                   (713) 228-8600
                                                   (713) 228-8778 (Fax)
                                                   Attorney for Applicant